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INTERGOVERNMENTAL NEGOTIATING COMMITTEE
FOR A FRAMEWORK CONVENTION ON CLIMATE CHANGE
Eighth session
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Item 5 of the provisional agenda

ACTIVITIES OF THE UNITED NATIONS SYSTEM RELATED TO THE CONVENTION

Information on activities related to the Convention received from United Nations entities and other international organizations

Addendum

Note by the secretariat*

As indicated in paragraph 4 of document A/AC.237/39, this addendum presents to the Committee, in English only, the full information provided by organizations on their activities related to the Convention.

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* The information provided by the reporting entities is reproduced herein as submitted to the secretariat. Editorial changes have been made only where essential to clarity.

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UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD)

1.	Organization:	United Nations Conference on Trade and Development (**UNCTAD**)
2.	Title of Activity:	Joint implementation
3.	Short Description:	A study on new mechanisms for joint implementation of commitments utilising tradeable carbon emission entitlements.
4.	Purpose/Objectives:	To improve knowledge of possible economic instruments to reduce global warming.
5.	Scope:	Global
6.	Cooperating Organizations:	
7.	Duration:	4 months
8.	Approx. Cost (US$):	30,000
9.	Source of Funding:	Government of Germany
10.	Relation to Convention (Subject Code):	J01, M01

1.	Organization:	United Nations Conference on Trade and Development (**UNCTAD**)
2.	Title of Activity:	Tradeable permits
3.	Short Description:	A study on the costs and benefits of a global system of tradeable carbon emission entitlements: an analysis by country categories 1. low-income countries; 2. newly-industrialising countries; 3. energy (fossil fuel) exporting developing countries; 4. industrialised countries

4.	Purpose/Objectives:	To improve knowledge of possible economic instruments to reduce global warming.
5.	Scope:	Global
6.	Cooperating Organizations:	
7.	Duration:	3 months
8.	Approx. Cost (US$):	40,000
9.	Source of Funding:	Government of Germany
10.	Relation to Convention (Subject Code):	J01, E01, M01

1.	Organization:	United Nations Conference on Trade and Development (UNCTAD)
2.	Title of Activity:	Tradeable permits: design requirements
3.	Short Description:	A study on essential design requirements of a global system of tradeable carbon emission entitlements.
4.	Purpose/Objectives:	To improve knowledge of possible economic instruments to reduce global warming.
5.	Scope:	Global
6.	Cooperating Organizations:	
7.	Duration:	3 months
8.	Approx. Cost (US$):	40,000
9.	Source of Funding:	Government of Norway
10.	Relation to Convention (Subject Code):	J01, M01

1.	Organization:	United Nations Conference on Trade and Development (**UNCTAD**)
2.	Title of Activity:	CO2 Emissions Market
3.	Short Description:	A study on model rules and regulations for a global CO2 emissions market.
4.	Purpose/Objectives:	To improve knowledge of possible economic instruments to reduce global warming.
5.	Scope:	Global
6.	Cooperating Organizations:	
7.	Duration:	3 months
8.	Approx. Cost (US$):	40,000
9.	Source of Funding:	Government of Norway
10.	Relation to Convention (Subject Code):	J01, M01

1.	Organization:	United Nations Conference on Trade and Development (**UNCTAD**)
2.	Title of Activity:	Environmental value-added tax
3.	Short Description:	A study on the conceptual issues involved in the design of a global environmental value-added tax (EVAT) and their international implications.
4.	Purpose/Objectives:	To improve knowledge of possible economic instruments to reduce global warming.
5.	Scope:	Global
6.	Cooperating Organizations:	
7.	Duration:	4 months

8.	Approx. Cost (US$):	50,000
9.	Source of Funding:	Unfunded
10.	Relation to Convention (Subject Code):	J01, M01

UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)

1.	Organization:	United Nations Environment Programme (UNEP)
2.	Title of Activity:	Country case studies on sources and sinks of greenhouse gases
3.	Short Description:	Support to OECD Environment Directorate and IPCC Working Group I for GHG inventory methodology development. Testing methodology in a series of 11 country studies. Also pan-Amazonia sub-project on rain forest monitoring.
4.	Purpose/Objectives:	Testing of IPCC methodology in ll country case studies.
5.	Scope:	Global
6.	Cooperating Organizations:	OECD, IPCC, INPE
7.	Duration:	01.09.92 - 31.07.94
8.	Approx. Cost (US$):	4.7 Million
9.	Source of Funding:	GEF
10.	Relation to Convention: (Subject Code):	B01, B03

1.	Organization:	United Nations Environment Programme (UNEP)
2.	Title of Activity:	Greenhouse gas abatement costing studies
3.	Short Description:	Review of the subject of abatement costing pilot country studies and development of a methodology.
4.	Purpose/Objectives:	Preparation of a methodology to undertake national greenhouse gas abatement costing studies.
5.	Scope:	Global
6.	Cooperating Organizations:	RISO, TATA
7.	Duration:	November 1991 - June 1993

8.	Approx. Cost (US$):	1 Million
9.	Source of Funding:	Environment Fund
10.	Relation to Convention (Subject Code):	E01

1.	Organization:	United Nations Environment Programme (**UNEP**)
2.	Title of Activity:	Climate Change and Global Agricultural Potential
3.	Short Description:	Develop and test a methodology and MAP potential agricultural productivity in a pilot study for Bangladesh.
4.	Purpose/Objectives:	Improve methodologies for assessing potential impacts of climate change on agricultural productive capacity.
5.	Scope:	Global/National
6.	Cooperating Organizations:	FAO, ECU, IIASA
7.	Duration:	1993/1994
8.	Approx. Cost (US$):	500,000
9.	Source of Funding:	Environment Fund
10.	Relation to Convention (Subject Code):	F03, G04

1.	Organization:	United Nations Environment Programme (**UNEP**)
2.	Title of Activity:	Support to IPCC
3.	Short Description:	Provision of staff and financial resources for ongoing activities of IPCC.
4.	Purpose/Objectives:	Assessment of causes, effects and response options related to climate change
5.	Scope:	Global

6.	Cooperating Organizations:	WMO
7.	Duration:	January 1989 - December 1993
8.	Approx. Cost (US$):	1,524,000
9.	Source of Funding:	Environment Fund
10.	Relation to Convention (Subject Code):	L01, MO1

1.	Organization:	United Nations Environment Programme (UNEP)
2.	Title of Activity:	WCIRP
3.	Short Description:	Assessment of the impacts of climate variability and change on people and their environment.
4.	Purpose/Objectives:	Reduce vulnerability of socio-economic sectors to climate variability and change.
5.	Scope:	Global
6.	Cooperating Organizations:	WMO
7.	Duration:	May 1987 - December 1993
8.	Approx. Cost (US$):	4 million
9.	Source of Funding:	Environment Fund
10.	Relation to Convention (Subject Code):	C01, D01, F01, F02, F03, F04

1.	Organization:	United Nations Environment Programme (UNEP)
2.	Title of Activity:	IUCC
3.	Short Description:	Preparation of films; fact sheets and other information material; seminars, particularly in developing countries.

4.	Purpose/Objectives:	Dissemination of information related to climate change.
5.	Scope:	Global
6.	Cooperating Organizations:	WMO
7.	Duration:	Since July 1991
8.	Approx. Cost (US$):	1 Million
9.	Source of Funding:	Environment Fund, Governments
10.	Relation to Convention (Subject Code):	K01

1.	Organization:	United Nations Environment Programme (UNEP)
2.	Title of Activity:	Country study report
3.	Short Description:	To collect information on climate-related studies undertaken by governments, scientific bodies and interested organizations.
4.	Purpose/Objectives:	To provide the information to those who need it.
5.	Scope:	Global
6.	Cooperating Organizations:	IPCC
7.	Duration:	
8.	Approx. Cost (US$):	
9.	Source of Funding:	
10.	Relation to Convention (Subject Code):	A01

UNITED NATIONS POPULATION FUND (UNFPA)

1.	Organization:	United Nations Population Fund (**UNFPA**)
2.	Title of Activity:	Impact assessment population pressure, poverty and environmentally endangered zones
3.	Short Description:	Poverty and high population growth and density interact with environmental degradation and vice versa. The determination of the nature and impact of this interaction will contribute to the determination of the impact of climatic change.
4.	Purpose/Objectives:	To integrate population factors in environmental and developmental planning and policies.
5.	Scope:	Global/Regional/National
6.	Cooperating Organizations:	To be determined
7.	Duration:	5 - 6 years
8.	Approx. Cost (US$):	10 million
9.	Source of Funding:	Multilateral/bilateral
10.	Relation to Convention (Subject Code):	COI

1.	Organization:	United Nations Population Fund (**UNFPA**)
2.	Title of Activity:	Impact assessment: population pressure, poverty and environmentally endangered zones
3.	Short Description:	The analysis of the interaction between population growth and density, poverty and environmental degradation is a necessary first step in the assessment of the socio-economic impact of this interaction
4.	Purpose/Objectives:	To integrate population factors in environmental and developmental planning and policies
5.	Scope:	Global/Regional/National
6.	Cooperating Organizations:	To be determined

7.	Duration:	5 - 6 years
8.	Approx.Cost (US$):	10 million
9.	Source of Funding:	Multilateral/bilateral
10.	Relation to Convention (Subject Code):	D01

1.	Organization:	United Nations Population Fund (UNFPA)
2.	Title of Activity:	Population, environment and climatic change in the South Pacific
3.	Short Description:	To promote awareness of the links between population and environmental degradation among policy makers, planners and at the community level in the South Pacific.
4.	Purpose/Objective:	The integration of population factors in all environmental and socio-economic planning in the South Pacific.
5.	Scope:	Regional/National
6.	Cooperating Organizations:	South Pacific Regional Environment Programme (SPREP)
7.	Duration:	Four years
8.	Approx. Cost (US$):	
9.	Source of Funding:	UNFPA
10.	Relation to Convention Subject Code):	K0I

1.	Organization:	United Nations Population Fund (UNFPA)
2.	Title of Activity:	Population, environment and climatic change in the South Pacific

3.	Short Description:	Increase the capacities of the states of the South Pacific in the field of demographic and population analysis in order to enable them to utilise these skills in environmental and socio-economic planning.
4.	Purpose/Objectives:	The integration of population factors in all environmental and socio-economic planning in the Pacific.
5.	Scope:	Regional/National
6.	Cooperating Organizations:	South Pacific Regional Environmental Programme (SPREP)
7.	Duration:	Four years
8.	Approx. Cost (US$):	
9.	Source of Funding:	UNFPA
10.	Relation to Convention (Subject Code):	M01

INTERGOVERNMENTAL NEGOTIATING COMMITTEE FOR FRAMEWORK CONVENTION ON CLIMATE CHANGE (INC/FCCC)
AND
UNITED NATIONS INSTITUTE FOR TRAINING AND RESEARCH (UNITAR)

1.	Organization:	Intergovernmental Negotiating Committee for Framework Convention on Climate Change **(INC/FCCC)** and United Nations Institute for Training and Research **(UNITAR)**
2.	Title of Activity:	Information and Training Programme to Promote the Implementation of the United Nations Framework Convention on Climate Change.
3.	Short Description:	The programme has been developed by the INC/FCCC and UNITAR in collaboration with UNDP, GEF and the IPCC secretariat. It aims to promote the implementation of the Convention through ongoing information collection and dissemination, national workshops and follow-up processes. The twelve-month Pilot Phase will begin in the fall of 1993 and involve three countries of Southeast Asia, Africa and the Baltics, respectively.
4.	Purpose/Objectives:	To provide information on the Convention and to promote national dialogue at the policy level on the provisions of the Convention as input into future capacity-building, policy formulation and national and/or regional cooperation.
5.	Scope:	Global, developing countries and economies in transition
6.	Cooperating Organizations:	INC/FCCC and UNITAR in collaboration with UNDP, GEF and the IPCC secretariat
7.	Duration:	Initial twelve-month Pilot Phase (tentatively 8/93-8/94) preceded by a two month preparatory phase (June-August 1993)
8.	Approx. Cost (US$):	Pilot Phase: $900,000
9.	Source of Funding:	Global Environment Facility implemented by UNDP
10.	Relation to Convention (Subject Code):	K01

THE UNITED NATIONS UNIVERSITY (UNU)

1.	Organization:	The United Nations University (UNU)
2.	Title of Activity:	Greenhouse Gas Indices and International Policy Making
3.	Short Description:	The project carried out research on greenhouse indices, related international policy-making and governance, and the necessary North-South resource transfers. The main output of the project will be a book entitled Global Greenhouse Regime: Who Pays? edited by Peter Hayes and Kirk R. Smith to be jointly published by the United Nations University Press and Earthscan in July 1993.
4.	Purpose/Objectives:	The project is aimed at filling the existing knowledge gap relating to the amounts and sources of the greenhouse gases emitted from the various countries and regions, both industrialized and developing, and their relation to international governance, and laying the basis for negotiations after UNCED.
5.	Scope:	Global
6.	Cooperating Organizations:	East-West Center, Hawaii, USA, and Nautilus Pacific Research Inc., Australia. In addition, many scholars from all major regions of the world contributed to the research.
7.	Duration:	January 1991 - July 1993
8.	Approx. Cost (US$):	67,000
9.	Source of Funding:	UNU (US$30,750), Nautilus Pacific Research (US$25,000), East-West Center (US$11,250)
10.	Relation to Convention (Subject Code):	B02

ECONOMIC COMMISSION FOR AFRICA (ECA)

1.	Organization:	Economic Commission for Africa (**ECA**)
2.	Title of Activity:	African Centre of Meteorological Applications for Development (**ACMAD**)
3.	Short Description:	The immediate objectives are: investigating the effects of drought, cyclones and other extreme phenomena: promoting the development of the applications of meteorological data and information to the individual and collective solution of environmental problems thought better understanding of the anomalies of weather and climate in Africa.
4.	Purpose/Objectives:	
5.	Scope:	Regional: Africa
6.	Cooperating Organizations:	WHO, UNEP, FAO, National Meteorological and Hydrological Services
7.	Duration:	Continuous
8.	Approx. Cost (US$):	
9.	Source of Funding:	ECA member States, UNEP, WMO, FAO
10.	Relation to Convention (Subject Code):	AO1, CO1, DO1, KO1, LO1

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (ESCAP)

1. Organization: Economic and Social Commission for Asia and the Pacific (ESCAP)

2. Title of Activity: Second Asia-Pacific Seminar on Climate Change Bangkok, 29 - 31 March 1993

3. Short Description: The seminar was organized in cooperation with the Asian Development Bank (ADB) within the framework of ADB's Regional Study on Global Environmental Issues.

4. Purpose/Objectives:

   a. To present and discuss the state of the art on the assessment of climate change implications at regional level.

   b. To present preliminary findings of eight country studies, carried out within the context of ADB's Regional Study, on the assessment of climate change implications at national level and of available mitigation and adaptation options for developing national response policies.

   c. To present further national reports from countries of the region.

   d. To develop elements for a regional strategy to cope with climate change, encompassing:

      * strengthening of research, impact assessment and monitoring;
      * developing emission inventories;
      * building climate consideration into long-range planning;
      * identifying most cost-effective means for reducing emissions and enhancing sinks;
      * ensuring adequate funds to support mitigation and adaptation policies;
      * institutional strengthening and improving of regional and international cooperation.

5. Scope: Regional

6. Cooperating Organizations: Asian Development Bank

7. Duration: 3 days

8. Approx. Cost (US$): US$ 75000

9. Source of Funding: Asian Development Bank

10. Relation to Convention (Subject code): A01, B02, B03, B05, C01, D01, E01, F01, F02, F03, F04, G01, G02, G03, G04, G05, G06, G07, I01, J01, K01, M01.

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1. Organization: Economic and Social Commission for Asia and the Pacific (**ESCAP**)

2. Title of Activity: Regional Cooperation on Global Climate Change

3. Short Description: The following activities are being undertaken:

1. Developing a regional network of national focal points among research and decision-making institutions involved with climate change issues.

2. Developing a Regional Strategy to cope with climate change.

3. Participating in major international meetings on research and negotiations related to the Framework Convention on Climate Change.

4. Organization of a Regional Conference on Climate Change.

5. Promoting of follow-up activities to Agenda 21.

The current phase involves the holding of two consultative meetings at Bangkok with the participation of experts from selected countries:

20 - 22 July 1993: Development of a Regional Strategy on Climate Change.

30 Sept. - 2 Oct. 93: Development of the Terms of Reference for a Regional Network on Climate Change.

4. Purpose/Objectives:

1. Promoting international cooperation among countries of the ESCAP region through information exchange and consultation on scientific and policy issues related to climate change, within the context of global negotiations

on the Framework Convention on Climate Change.

2. To develop a network of research and decision-making institutions based on data gathering and information exchange mechanisms.

3. To strengthen national capabilities and coordinate regional research activities on climate change issues, the assessment of environmental and socio-economic impacts and the evaluation of mitigation and adaptation policies.

4. To develop a regional strategy involving the dissemination of methodologies for compiling emissions and sinks inventories; the promotion of mitigation policies aimed at curbing emissions and enhancing sinks of greenhouse gases; ensuring technical and financial support for adaptation policies in relevant sectors, such as energy, agriculture, coastal zone management, industry, transport, forestry, water resources and disaster prevention.

5. Scope: Regional

6. Cooperating Organizations:

7. Duration: 2 years

8. Approx. Cost (US$): US$ 155,000

9. Source of Funding: Government of Japan

10. Relation to Convention (Subject Code): A01, B02, B03, B05, C01, D0l, E0l, F0l, F02, F03, F04, G0l, G02, G03, F04, G05, G06, G07, H0l, I0l, J0l, K0l, L0l, M01.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)

1.	Organization:	Food and Agriculture Organization of the United Nations **(FAO)**
2.	Title of Activity:	Expert Consultation on "Global Climatic Change and Agricultural Production": direct effects of changing hydrological and plant physiological processes.
3.	Short Description:	A meeting, mid-December 1993, in Rome, bringing together about 25 invited experts and land-use planning specialists.
4.	Purpose/Objectives:	Analyse and assess the effect of higher CO2, UV-B and tropospheric ozone, higher temperatures and changing rainfall/evapotranspiration ratios on food production in developing countries.
5.	Scope:	Mainly developing countries
6.	Cooperating Organizations:	None
7.	Duration:	1 week
8.	Approx. Cost (US$):	140.000
9.	Source of Funding:	Mainly FAO, with some bilateral inputs
10.	Relation to Convention (Subject Code):	CO1, FO2, FO3

1.	Organization:	Food and Agriculture Organization of the United Nations **(FAO)**
2.	Title of Activity:	Interdepartmental Working Group on Environment and Sustainable Development, sub-group on Climate Change.
3.	Short Description:	A technical group composed of 13 members belonging to the Departments of Agriculture, Fisheries, Forestry, Economic and Social Policy, and the legal office.
4.	Purpose/Objectives:	(i) to provide a co-ordination mechanism for climate change-related work within FAO; (ii) to provide a forum for assessing internal and external work on climate change and its

implication for FAO's Regular and Field Programmes;

(iii) to formulate recommendations for FAO's Programme of Work and Budget;

(iv) to assist in the clearance of IPCC and other UN documents related to climate change and its potential impact on agriculture, forestry and fisheries;

(v) to revise and elaborate FAO Position Papers on Climate Change.

5. Scope: Global

6. Cooperating Organizations: None

7. Duration: The Group was created in 1988.

8. Approx. Cost (US$): 200,000 p.a.

9. Source of Funding: FAO

10. Relation to Convention (Subject Code): I01, K01, M01

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1. Organization: Food and Agriculture Organization of the United Nations **(FAO)**

2. Title of Activity: Expert consultation on "Biofuels as a sustainable substitute for fossil fuels"

3. Short Description: A meeting of about 20 experts to be held in Rome during mid-1993.

4. Purpose/Objectives: The expert consultation will examine the following points:

(i) the agronomic feasibility of biofuels (identification of the most suitable species, irrigation requirements, environmental impacts of wastes, etc.);

(ii) the economic feasibility of biofuels, which depends on the price of fossil fuels. Many countries have been spending a sizeable fraction of their

agricultural export earnings to import fossil fuels. It may be more economical to produce liquid fuel from locally grown biomass;

(iii) the socio-economic feasibility (income generation in rural areas, competition with food crops, etc.);

(iv) the technology feasibility of current bioenergy conversion processes, including fermentation, combustion, gasification and pyrolysis, with emphasis on the quantitative aspects;

(v) the institutional feasibility (e.g., the effects of existing legislation on restricting or encouraging biofuel generation and utilization, credit facilities available to assist investments and research needs and training).

5. Scope: Global, with emphasis on developing countries.

6. Cooperating Organizations: None

7. Duration: 1 week

8. Approx. Cost (US$): 100,000

9. Source of Funding: FAO

10. Relation to Convention (Subject Code): EO1, G01, G04, G05, H01, I01, K01

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1. Organization: Food and Agriculture Organization of the United Nations **(FAO)**

2. Title of Activity: AMDASS, FAO Agrometeorological data systems

3. Short Description: A world-wide agroclimatic data base covering about 16500 stations, with:

(i) monthly normals for 11 elements (observed, such as rainfall, temperatures, or calculated, such as potential evapotranspiration or night-time temperature);

		(ii) long-term historical monthly rainfall and temperature series;
		(iii) 10-daily near real-time precipitation data covering west, east and south Africa.
4.	Purpose/Objectives:	Source of data for land-use and suitability studies; near real-time impact assessment in Africa (Early Warning).
5.	Scope:	World-wide for monthly data; Africa for 10-daily ones
6.	Cooperating Organizations:	None, but data are obtained though contacts with a number of organizations
7.	Duration:	The activity started in 1975.
8.	Approx. Cost (US$):	150,000 p.a.
9.	Source of Funding:	FAO, some bilateral inputs.
10.	Relation to Convention (Subject Code):	A01, C01

1.	Organization:	Food and Agriculture Organization of the United Nations **(FAO)**
2.	Title of Activity:	Tropical Forest Action Programme (TFAP) and Global Forest Resources Assessment (GFRA)
3.	Short Description:	A concerted effort of the international community to help tropical countries formulate and implement strategies for the conservation and sustainable development of their forests.
4.	Purpose/Objectives:	"A tool or strategy that developing countries can use to turn the tropical forest crisis into a development opportunity".
5.	Scope:	Tropical countries (currently 38 in Africa, 20 in Asia/Pacific and 32 in Latin America/Caribbean
6.	Cooperating Organizations:	None, but support received from 20 bilateral donors, the four major development banks and 16 non-governmental and intergovernmental organizations. For GRFA, forest resources in developed countries are carried out jointly with ECE.

7.	Duration:	Started in 1985
8.	Approx. Cost (US$):	External financial support to National Forestry action plans amounts to approx. 2,300 MUS$ (2.3 billion US$), i.e. approx. 330 MUS$ p.a.
9.	Source of Funding:	See above, "cooperating agencies"
10.	Relation to Convention (Subject Code):	G05, IO1, M01

1.	Organization:	Food and Agriculture Organization of the United Nations **(FAO)**
2.	Title of Activity:	Effect of climate change on population supporting capacities
3.	Short Description:	An activity coordinated by the Land and Water Development Division under the aegis of the FAO interdepartmental sub-group on climate change, jointly with the Environmental Change Unit (Univ. Oxford) and UNEP.
4.	Purpose/Objectives:	Using global circulation model outputs, assess the effect which global change will have on human food supply, including geographic variations thereof. Methodology development.
5.	Scope:	Global
6.	Cooperating Organizations:	UNEP, ECU
7.	Duration:	2 years, starting late 1993
8.	Approx. Cost (US$):	600,000
9.	Source of Funding:	UNEP, FAO
10.	Relation to Convention (Subject Code):	C01, D01

1.	Organization:	Food and Agriculture Organization of the United Nations (FAO)
2.	Title of Activity:	Land-use data base development (Interdepartmental Working Group on Land-Use Planning).
3.	Short Description:	Development of criteria and a hierarchical system of actual land uses, including social and economic aspects.
4.	Purpose/Objectives:	Application of the system in individual countries through national entities, and generation of a global fully georeferenced data base on land uses, linked to country-level statistical and census data; for monitoring and modelling purposes, and as a tool for assessment of national and global net greenhouse emissions from rural sources.
5.	Scope:	Developing countries and global
6.	Cooperating Organizations:	UNEP
7.	Duration:	Several years
8.	Approx. Cost (US$):	(methodological aspects only) 200,000
9.	Source of Funding:	FAO, UNEP, Bilateral
10.	Relation to Convention (Subject Code):	A01, B01, B05

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)

1.	Organization:	United Nations Educational, Scientific and Cultural Organization (**UNESCO**)
2.	Title of Activity:	International Environmental Education Programme (**IEEP**) (UNESCO/UNEP)
3.	Short Description:	Promotes the introduction of environmental education and information at all levels of formal and non-formal education.
4.	Purpose/Objectives:	Education and information on climate change has been included increasingly in the IEEP activities.
5.	Scope:	
6.	Cooperating Organizations:	UNEP
7.	Duration:	Ongoing since 1975 to be continued in 1994-1995
8.	Approx. Cost (US$):	UNESCO $1,200,000 for 1994-1995
9.	Source of Funding:	Regular budget
10.	Relation to Convention (Subject Code):	K01

1.	Organization:	United Nations Educational, Scientific and Cultural Organization (**UNESCO**)
2.	Title of Activity:	Contributing to the Global Terrestrial Observing System (GTOS)
3.	Short Description:	Establishment and maintenance of an effective network of 50-100 sites integrated into a regional and global information system on global change. The science plan for GTOS is being elaborated in 1993-1994 by a task force led by IGBP-GTCE, building on the recommendations of an IGBP/UNESCO/OSS workshop held in Fontainebleau in July 1992 (report published by UNESCO in 1993).

4.	Purpose/Objectives:	To develop an integrated multi-scale system for detecting and monitoring terrestrial responses to global change.
5.	Scope:	Global
6.	Cooperating Organizations:	IGBP-GCTE, START, UNEP, FAO, WMO, OSS, etc.
7.	Duration:	Planning - 1992-95; operational phase open ended.
8.	Approx. Cost (US$):	Planning phase - circa $500.000 per year. Operational phase: circa $12-24 million per year.
9.	Source of Funding:	Funds to be sought
10.	Relation to Convention (Subject Code):	L01

1.	Organization:	United Nations Educational, Scientific and Cultural Organization **UNESCO**
2.	Title of Activity:	i) H-1.1: International Hydrological Programme (IHP) Review of the scientific aspects of the interface processes of water transport through the atmosphere-vegetation-soil system. ii) H-2.1: Study of the relationship between climate variability (and expected changes) & hydrologic regimes affecting water balance components.
3.	Short Description:	i) H-1.1: The project is connected with terrestrial-atmospheric interactions of water transfer at different scales. ii) H-2.1: Various climatic scenarios are considered in terms of their impact on the hydrological cycle.
4.	Purpose/Objectives:	i) H-1.1: To improve understanding of the surface hydrology for input into AGCMs. ii) H-2.1: To provide information on water resource management issues connected with climatic change.
5.	Scope:	Global
6.	Cooperating Organizations:	IGBP/WCRP
7.	Duration:	Indefinite
8.	Approx. Cost (US$):	$40,000 plus, over 2 years (coordination costs only)
9.	Source of Funding:	UNESCO Programme Funds
10.	Relation to Convention (Subject Code):	H-I.1 : LO1 H-2.1 : CO1/F02

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION OF UNESCO (IOC)

1.	Organization:	Intergovernmental Oceanographic Commission of UNESCO (IOC)
2.	Title of Activity:	Coastal Zone Observations of parameters relevant to assessment of impact of climate change on coastal areas.
3.	Short Description:	Development of coastal zone systematic and adequate observations, related training in observations, maintenance, analysis, evaluations and planning; with establishment of long-term baseline stations, beach profiling, sedimentary budgets, coastal erosion evaluations, sea level and wave conditions.
4.	Purpose/Objectives:	Establishment of capabilities to install, monitoring and apply tested and proven scientific observations and methods for systematic observations of conditions in the coastal ocean, and its uses in relation to climate variability and other changes for assessment and management.
5.	Scope:	Regional
6.	Cooperating Organizations:	WMO, UNEP, IUCN, regional bodies, donors
7.	Duration:	Indefinite
8.	Approx. Cost (US$):	Present International Funding 300-500 kUS$/year; not sufficient for coverage
9.	Source of Funding:	Donors and member States.
10.	Relation to Convention (Subject Code):	C01, F01, L01, M01

1.	Organization:	Intergovernmental Oceanographic Commission of UNESCO (IOC)
2.	Title of Activity:	Assessments of impacts on coastal zones and sea level rise
3.	Short Description:	Evaluation on a regional basis of impacts of climate change and variability on coastal areas, including sea level observations (GLOSS) other regional oceanographic

		data sources, and monitoring programmes.
4.	Purpose/Objectives:	To develop and maintain regional ocean and ecosystem observations, (e.g. coral reefs, circulation, sea level) establish cooperation and networks and ensure regular evaluations of changes and related potential impacts for decisions making, with related training, capacity-building; awareness creation.
5.	Scope:	Global, regional and national
6.	Cooperating Organizations:	UNEP, IUCN, WMO
7.	Duration:	Several projects are initiated for a period of some years after which evaluation is planned
8.	Approx. Cost (US$):	US$ Internationally available funds not fully sufficient, about 100-200k US$/biennium
9.	Source of Funding:	National and international and catalytic international.
10.	Relation to Convention (Subject Code):	C01, K01, L01, M01

1.	Organization:	Intergovernmental Oceanographic Commission of UNESCO (**IOC**)
2.	Title of Activity:	Ocean role in Carbon budget
3.	Short Description:	Research and observations of CO2 in the ocean and related valuations and modelling for understanding of dominating processes.
4.	Purpose/Objectives:	To reduce the uncertainties in relation to forecasting of CO2 variations and increases on the role of the ocean therein, as well as in related biogeochemical processes, as a response also to Agenda 21 (chapter 17).
5.	Scope:	Global and regional
6.	Cooperating Organizations:	ICSU, SCOR
7.	Duration:	3 - 6 years
8.	Approx. Cost (US$):	US$ International catalytic funds from IOC about 100k US$/year

9.	Source of Funding:	Donors, member States
10.	Relation to Convention (Subject Code):	B04, B05, L01

1.	Organization:	Intergovernmental Oceanographic Commission of UNESCO (**IOC**)
2.	Title of Activity:	Research and systematic ocean observations to quantify the role of the ocean in the climate system, in particular as a source or sink for greenhouse gases
3.	Short Description:	To promote marine science investigations and related ocean services through concerted actions of its 122 member States, including related capacity-building.
4.	Purpose/Objectives:	to develop the Global Ocean Observing System (GOOS) and its module for climate monitoring, assessment and prediction and its module for monitoring the coastal zone environment and its changes.
5.	Scope:	Global and regional
6.	Cooperating Organizations:	ICSU, WMO and UNEP
7.	Duration:	GOOS Planning and Design Phase started - fully operational GOOS is expected by about the year 2007
8.	Approx. Cost (US$):	
9.	Source of Funding:	
10.	Relation to Convention (Subject Code):	B04, B05, C01, F01, K01, L01, M01

1.	Organization:	Intergovernmental Oceanographic Commission of UNESCO (**IOC**)
2.	Title of Activity:	Technical/international Cooperation
3.	Short Description:	Through the inter-Secretariat Committee on Scientific Programmes relating to Oceanography (ICSPRO), which FAO, WMO, IMO, UN and UNEP are currently

3.	Short Description:	Through the inter-Secretariat Committee on Scientific Programmes relating to Oceanography (ICSPRO), which FAO, WMO, IMO, UN and UNEP are currently participating in, IOC cooperates to implement scientific research and related service programmes at the global level. In addition IOC cooperates with various regional intergovernmental and national organizations as well as NGO's for implementation of scientific and technical projects, especially training related projects
4.	Purpose/Objectives:	To assist IOC member States in development of their capabilities in marine scientific research and related service operations through cooperative projects on regional and national basis
5.	Scope:	"Regional" and "National" basis
6.	Cooperating Organizations:	UN Agencies: FAO, WMO, UN, UNEP Regional Org: SPREP, SOPAC, CCOP, ROPME, IOMAC National Org.: SAREC, DANIDA, BMTF (Germany), NOAA (USA), NERC (UR), JODC (Japan), Univ. Tokyo (Japan), NTO (India) NGOs: ICSU, SCOR, ECOR, SCAR, TAPSO, AESTM
7.	Duration:	
8.	Approx. Cost (US$):	
9.	Source of Funding:	
10.	Relation to Convention (Subject Code):	M01

1.	Organization:	Intergovernmental Oceanographic Commission of UNESCO (**IOC**)
2.	Title of Activity:	Programme on Training, Education and Mutual Assistance in Marine Sciences (TEMA)
3.	Short Description:	The Programme plays a catalytic role to stimulate and coordinate specific activities related to capacity- building

3. Short Description: The Programme plays a catalytic role to stimulate and coordinate specific activities related to capacity- building of IOC member States, with collaboration of the Commission's subsidiary programme groups in ocean research, systematic observation and services, as well as marine pollution monitoring. The assistance includes:

(i) providing short and long-term training opportunities and assistance to participate in international meetings to scientists from developing countries;

(ii) organizing a series of public lectures on specific topics of marine sciences and to produce audiovisual aid for public awareness of marine science and related matters;

(iii) arranging, upon request, missions of experts to advise country's development in technical projects and marine and coastal management plans; and

(iv) assisting Member States in designing and implementing their national development projects for extra-budgetary resources.

4. Purpose/Objectives: Objectives of the Programme are to:

(i) assist the Commission's member States to develop their capacities to carry out research and operational activities in marine sciences at their national level, and to enable their scientists and institutions to participate in international oceanographic cooperative projects;

(ii) help bridge the gaps in marine scientific research and operational capabilities among Member States.

5. Scope: Global, regional and national

6. Cooperating Organizations: IOC National Commission of member States
National Funding Agencies of IOC member States

7. Duration: All year

8. Approx. Cost (US$):

9. Source of Funding: UNESCO Reg. Budget, MS donations

10. Relation to Convention: (Subject Code): K01

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)

1.	Organization:	International Civil Aviation Organization (ICAO)
2.	Title of Activity:	Aircraft engine emissions database and forecasts
3.	Short Description:	Development of a database and forecasts on where aircraft fly (longitude, latitude, altitude) and what they emit (NOx, etc).
4.	Purpose/Objectives:	Part of ICAO's work programme on aircraft engine emissions, but could also contribute to your work on greenhouse gas inventories.
5.	Scope:	Global
6.	Cooperating Organizations:	NASA, European Civil Aviation Conference also currently exploring cooperation with IPCC, WMO and UNEP
7.	Duration:	1993/1994
8.	Approx. Cost (US$):	Costs largely borne by individual States
9.	Source of Funding:	No direct funding at present. EC funds some European inputs
10.	Relation to Convention (Subject Code):	B01, B02, B05

1.	Organization:	International Civil Aviation Organization (ICAO)
2.	Title of Activity:	Control of aircraft engine emissions
3.	Short Description:	Review of actions needed to control the effects of aircraft engine emission on the environment around airports, the ozone layer and the global climate. Includes examination of technological developments, operational solutions, and regulatory and charging mechanisms.
4.	Purpose/Objectives:	To minimize or, if necessary, decrease the adverse impacts of aircraft emissions on the environment.

5.	Scope:	Global
6.	Cooperating Organizations:	Expected to be of interest to IPCC WG2
7.	Duration:	1993/1994 and probably beyond
8.	Approx. Cost (US$):	Costs largely borne by individual States
9.	Source of Funding:	None at present
10.	Relation to Convention (Subject Code):	E01, G03, H01, J01

WORLD HEALTH ORGANIZATION (WHO)

1.	Organization:	World Health Organization (WHO)
2.	Title of Activity:	Review report on the potential health impact of global climate change
3.	Short Description:	This review is carried out jointly with the World Meteorological Organization (WMO) during 1993 and 1994 and will update a similar report published in 1990 by WHO.
4.	Purpose/Objectives:	To provide an up-to-date assessment of the scientific basis for health impact of global climate change.
5.	Scope:	Global
6.	Cooperating Organizations:	WMO, US EPA, IPCC, UNEP (not yet confirmed)
7.	Duration:	1993 - 1994
8.	Approx. Cost (US$):	500,000
9.	Source of Funding:	WHO, WMO, US EPA, UNEP (not yet confirmed)
10.	Relation to Convention (Subject Code):	COI, KOI

WORLD METEOROLOGICAL ORGANIZATION (WMO)

1.	Organization:	World Meteorological Organization (WMO)
2.	Title of Activity:	World Climate Programme, Atmospheric Research and Environment Programme Department, World Weather Watch, Technical Co-operation Department and other programmes.
3.	Short Description:	The WMO scientific and technical programmes provide for the environment and climate studies relevant to the needs for improved knowledge and systematic observations required by the Convention.
4.	Purpose/Objectives:	To facilitate collection and management of data to foster the effective application of climate knowledge, to improve the understanding of climate processes and to assist countries in relevant national activities.
5.	Scope:	Global and regional
6.	Cooperating Organizations:	UNEP, UNESCO and IOC, ICSU, FAO, UNDP, WHO and others
7.	Duration:	Ongoing at least since 1988
8.	Approx. Cost (US$):	About 20 M annually
9.	Source of Funding:	Regular budget trust funds UNDP
10.	Relation to Convention (Subject Code):	A01, B05, F02, F03, F04, G01, G04, G05, K01, L01, M01

1.	Organization:	World Meteorological Organization (WMO)
2.	Title of Activity:	Fellowships and training activities in climate-related subjects
3.	Short Description:	About 25/30 short-term and 4/5 long-term fellowships awarded per year and about 2/3 training events implemented per year on climate-related issues.
4.	Purpose/Objectives:	To assist WMO Members in meeting their training needs.
5.	Scope:	Global and regional
6.	Cooperating Organizations:	National Meteorological Services and various Agencies of

		the UN family short-term fellowships: 2/3 months; training events: 1-2 weeks
7.	Duration:	
8.	Approx. Cost (US$):	Not applicable
9.	Source of Funding:	WMO regular budget, UNDP, Trust Funds
10.	Relation to Convention (Subject Code):	K01

1.	Organization:	World Meteorological Organization (**WMO**)
2.	Title of Activity:	Hydrology and Water Resources Programme of the World Meteorological Organization
3.	Short Description:	To advance the assessment and forecasting of the quantity and quality of water resources and in the mitigation of water-related [pollution].
4.	Purpose/Objectives:	To promote sustainable development.
5.	Scope:	Global, regional and national
6.	Cooperating Organizations:	UNESCO, World Bank, UNDP and several other water orientated UN bodies and agencies
7.	Duration:	Ongoing
8.	Approx. Cost (US$):	SFR 12 million (SFR 112 million)
9.	Source of Funding:	Regular Budget (UNDP, Funds in Trust)
10.	Relation to Convention (Subject Code):	F02

1.	Organization:	World Meteorological Organization (**WMO**)
2.	Title of Activity:	Basic Data - Global Atmosphere Watch (GAW)
3.	Short Description:	GAW integrates many monitoring and research activities involving the measurement of atmospheric composition.

4.	Purpose/Objectives:	Serves as an early warning system to detect further changes in atmospheric concentrations of greenhouse gases changes in the ozone layer and in long-range transport of pollutants including acidity, and toxicity of rain as well as the atmospheric burden of aerosols.
5.	Scope:	Global
6.	Cooperating Organizations:	UNEP, WHO
7.	Duration:	Initiated in 1989 based on networks operation since the 1950s and 1960s
8.	Approx. Cost (US$):	Member operated
9.	Source of Funding:	National sources plus limited international funds
10.	Relation to Convention (Subject Code):	A01, B02, B04, C01

1.	Organization:	World Meteorological Organization (**WMO**) (with other sponsors, see no. 6)
2.	Title of Activity:	Global Climate Observing System
3.	Short Description:	Newly formed programme to define coordinate observations for climate change defection, monitoring, to support research and modifying of climate variations, and for economic decision-making.
4.	Purpose/Objectives:	Meet observational needs for various climate change activities
5.	Scope:	Global, regional and national
6.	Cooperating Organizations:	WMO, UNEP, IOC, ICSU
7.	Duration:	Begun 1992 - continuing activities
8.	Approx. Cost (US$):	Organization $500k/yr
9.	Source of Funding:	Sponsors, national contributions
10.	Relation to Convention (Subject Code):	A01, L01, M01

WORLD TOURISM ORGANIZATION (WTO)

1.	Organization:	World Tourism Organization (WTO)
2.	Title of Activity:	Significance of climate change for tourism
3.	Short Description:	Watching brief only. WTO's Environment Committee decided in 1991 to maintain contacts with WMO and UNEP on this subject but NOT to undertake a specific budgeted activity at that time.
4.	Purpose/Objectives:	
5.	Scope:	Would be global
6.	Cooperating Organizations:	WMO, UNEP
7.	Duration:	No time limit
8.	Approx. Cost (US$):	Zero
9.	Source of Funding:	
10.	Relation to Convention (Subject Code):	A01, C01, D01, L01

INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS (ICSU)

1.	Organization:	International Council of Scientific Unions (ICSU)
2.	Title of Activity:	International NGO
3.	Short Description:	Network of scientific bodies (national and international), mounts large interdisciplinary programmes of special interest to INC: the WCRP* (with WMO, IOC) and the IGBP*.
4.	Purpose/Objectives:	Promotion of scientific cooperation for benefit of humanity.
5.	Scope:	Global
6.	Cooperating Organizations:	UN, NGOs
7.	Duration:	1931
8.	Approx. Cost (US$):	Central budget 4 million
9.	Source of Funding:	National members subventions
10.	Relation to Convention (Subject Code):	B01-5, C01, L01

(*) WCRP = World Climate Research Programme
IGBP = International Geosphere-Biosphere Programme

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD)/ INTERNATIONAL ENERGY AGENCY (IEA)

1. ORGANIZATION: International Energy Agency (IEA). Founded in 1974, the IEA is an autonomous organisation within the framework of the Organisation for Economic Co-operation and Development (OECD), and is the form for co-ordinating the energy policies of 23 industrialised countries. The IEA's objectives include improvement of the world energy supply and demand structure, more efficient use of energy, development of alternative energy sources to reduce dependence on any one source, assistance in the integration of environmental and energy policies, and the promotion of co-operative relation between oil-producing and oil-producing and oil-consuming countries.

2.4 Activities: For a number of years now, the International Energy Agency has been looking into environmental problems associated with energy production and use and possible solutions to these problems. Particular attention has been - and will continue to be - given to the energy dimension of global climate change policies. Those activities in the field of energy and environment which are of relevance to the INC are listed in the following pages (those activities with most direct bearing are marked with an asterisk *).

5. Scope: Mainly Regional and Global

6. Co-operating Organizations: OECD, NEA (Nuclear Energy Agency), NOVEM (the Netherlands energy and energy and environment agency)

7. Duration: Short-term and on-going

8. Relation to Convention (Subject Code):

The IEA's Energy and Environment Activities Relevant to the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change

The following is a listing of IEA activities in the field of energy and environment, including joint initiatives with the Organisation for Economic Co-operation and Development (OECD), which may be of relevance to the INC.

Statistics and Data Exchange on Energy and Environment

*1. Gaseous emissions data base (IEA: Energy Statistics Division). A data base of emission factors and of the main gaseous emissions from energy extraction, supply and use is being developed for the support of analyses conducted by the IEA. Currently work concentrates on CO_2 emissions.

*2. **Greenhouse gas emissions inventories and inventory methodology development** (IEA): Energy Statistics Division; OECD: Environment Directorate). As part of the IPCC Working Group I Programme of Work, the OECD and IEA are supporting all tasks directed to develop IPCC methods for estimation and reporting of national greenhouse gas sources and sinks.

*3 **Greenhouse gas technology information exchange (GREENTIE)** (IEA): Energy Technology Co-operation Division; OECD: Environment Directorate. The IEA and the OECD are developing a greenhouse gas technology information exchange (GREENTIE) to facilitate identification and access to the wide range of information on energy sector technologies and practices which can help to mitigate greenhouse gas emissions. It is operated by NOVEM, the Netherlands energy and environment agency.

*4. **Indicators of progress in mitigating greenhouse gases** (IEA: Energy and Environment Division; OECD: Environment Directorate). The aim of this project is to present socio-economic indicators that can improve the understanding of societies' contribution to CO_2 emissions.

SECTORAL ANALYSES

1. **Study on electricity and the environment** (IEA): Energy and Environment Division). This study investigates the links between electricity and the environment. The main objectives are to examine the case for intervention to reduce or internalise the environmental effects of electricity production and use and to evaluate policy options.

2. **Study on the energy market effects of climate change policies** (IEA: Energy Economic Analysis Division). The results of this study will be examined from the perspective of the impacts on energy markets of such aspects as prices, demand and supply, and employment, as well as emissions reductions.

ECONOMIC AND POLICY ANALYSES

1. **Energy subsidies and environment** (IEA: Energy and Environment Division; OECD: Environment Directorate). This project includes an assessment of the potential environmental and economic benefits of eliminating energy subsidies and supports. It will also develop, test and apply a common methodology for estimating subsidies and price supports for coal, natural gas, oil and electricty.

2. **Economic analysis of policy instruments an options of furthering global energy security and protection of the environment.** (IEA: Energy Economic Analysis Division). This work entails assessment of the impact on OECD countries of several specific policy responses (e.g. imposition of carbon taxes) to identify the implications for energy consumption, energy efficiency and intensity, fuel mix and emissions.

3. **Evaluation of claimed energy efficiency results** (IEA: Energy Conservation and Efficiency Division). This study will review and compare Member countries' policies and programmes to improve energy efficiency. It will also, to the extent possible, compare claimed results.

4. **Scoping study on the energy dimensions of recycling** (IEA: Energy Conservation and Efficiency Division) This is an exploratory study which will identify the energy issues associated with Member countries' recycling programmes and policies. It will examine the analytical problems in assessing reputed energy benefits of various recycling schemes.

Energy Trade and Environment

*1. **Study on energy embodied in the trade of products and implications for carbon emission** (IEA: Energy and Environment Division and Energy Conservation and Efficiency Division; OECD: Directorate for Science, Technology and Industry). This study is quantifying the indirect and "offshore" carbon emissions embodied in the trade of energy and energy intensive products and determining how important a factor these might be in national emissions accounting.

D. Technology Development and Deployment

*1. **Energy technology backstops for reducing emissions of greenhouse gases** (IEA: Energy Technology Studies Division) This study analyses several economic and investment-related aspects of technology options to cope with climate change. It includes energy technology and energy systems for emission reduction; range of technical and economic potential of selected short-term (up to the year 2005) and potential long term (up to 2020-2030) options as well as carbon-free technology scenarios for far ahead in the future; critical factors affecting the implementation and penetration of the technologies: R&D requirements, priorities and programmes. A workshop on these issues will be organised co-operation with the IPCC in Autumn 1993.

2. **Assessing technologies for renewable energy sources and their potential** (IEA: Energy Technology Collaboration Division and Energy Conservation and Efficiency Division). This activity will provide suggestions for new technological developments, along with analysis of current R&D programmes, technology potential and achievements, and economic and environmental aspects.

3. **Enhancing market deployment of new and improved energy technologies** (IEA: Energy Technology Studies Division). This study reviews energy technology dissemination mechanisms and policies adopted by IEA Member countries. The aim is to examine the changing role of governments in promoting the adoption of R&D results from the laboratory into practical applications and progress concerning equipment, energy systems and services.

4. **Internalising the cost of energy technologies and systems** (IEA: Energy Technology Studies Division; OECD: Environment Directorate). This study looks at the criteria for determining the overall cost of energy technologies taking into account external costs during the entire fuel life-cycle. Attention will be given to innovative concepts such as total product/equipment recyclability and low-environmental impact (or "zero emission") energy technology systems. Their prospects and limits will be explored as well as opportunities for international collaboration.

COUNTRY AND AREA STUDIES

*1. **Review of energy policies of IEA countries** (IEA Secretariat, Country Studies Division). This is a recurrent survey of energy policy developments. Energy and environment, and particularly global climate change policies, is among the issues analysed.

*2. **INC follow-up: evaluation of methodologies of reviewing national communications** (IEA: Country Studies Division; OECD: Environment directorate). This activity will ascertain methodological issues that could develop in conducting country studies to support commitments made in the United Nations Framework Convention on Climate Change. IEA will focus on those issues relevant to the areas of energy policy, pricing and market structures and the adequacy of the analysis of the effects of proposed policies in these areas.

3. **Energy policy surveys of the New Independent States and Central and Eastern European Countries** (IEA: Non-Member Countries Division A). This series of overall energy policy reviews also covers energy-related environmental problems and possible solutions. The analysis includes the status of the output of energy related pollutants, their present state of control, plans for further control and clean-up for all energy sources for the full fuel cycle (i.e. including end-use).

4. **Energy and environmental issues in Central and Eastern Europe** (IEA: Non-Member Countries Division A; OECD: Environment Directorate). Analysis will focus on barriers to investments related to environmental protection and improve efficiency in the energy sector.

5. **Developing countries' energy reviews.** (IEA: Non-Member Countries Division B) Given the increasing share of developing countries in world energy demand, and the related environmental problems, a study on the determinants of energy demand in developing countries is under way for eventual publication towards the end of 1993.

UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

General overview of UNDP activities relating to climate change:

- assistance in the preparation of national programmes and national action plans on climate change;

- strengthening of national and regional capacities for monitoring of climate change and its impacts;

- examination of the interrelationship between climate change and sustainable development with special emphasis on efforts to combat drought and desertification;

- determination of greenhouse gas sources and sinks on regional and global bases; and

- evaluation of socio-economic impacts of climate change and development of effective response strategies nationally and regionally.

By sector, UNDP projects cover:

- Energy, including energy efficiency strategies, increased efficiency in electric power generation, transmission and distribution, energy conservation in the industrial, transport and residential/commercial end-use sectors, promotion of new and renewable energy sources (especially solar and wind energy), and determination of regional greenhouse gas emission sources and sinks;

- Industry, including more efficient industrial operations, transfer of most appropriate technologies, cleanup of industrial pollution and monitoring of transboundary air pollution;

- Water, including cleanup of polluted bodies of water and water quality monitoring; and

- Health, including environmental health programmes.

../...

Energy Sector Programmes and Activities

UNDP plays a catalytic role in providing technical assistance to developing countries for energy extraction/production, transformation and utilization, together with programmes to increase power sector and energy end-use efficiencies.

Activities of UNDP in the energy/environment area comprise two inter-related programmes:

(a) Those funded under UNDP's regular programme of technical cooperation that directly assist governments and which utilize various executing agencies or which are under a national execution modality implemented directly by governments.

(b) Activities funded under special purpose trust funds such as the energy/climate change area under the Global Environment Facility (GEF). Under GEF, UNDP has 32 projects in its portfolio of projects relating to global warming, amounting to an allocation of $102.4 million (See table, page 62). . (Please note that project number GLO/93/G31/A/1G/31 is an information and training programme to promote the implementation of the Framework Convention on Climate Change.)

UNDP regular programme

UNDP's funding strategy at the national level covering energy/environment interaction includes the following objectives:

- more efficient fossil fuel production and transport operations;
- more efficient fuel utilization operations in the industrial, transport, residential/commercial and domestic sectors;
- lower emissions from fossil fuel burning electric power plants;
- environmentally safer coal mining activities;
- re-injection back into reservoirs of safe disposal of geothermal waste fluids;
- design of new and renewable energy projects (solar, wind, biomass, multi-source); and
- enhancement of national energy planning and information systems including the incorporation of environmental considerations into overall energy system planning.

Sample UNDP-funded activities:

Bangladesh: Reduction of power losses due to technical and non-technical factors that will result in improved efficiency of power generation and reduction of gaseous emissions;

Bolivia: An environmental study to assess whether future production of geothermal fluids would impact wildlife;

China: (a) Modernizing a pilot coal-fired plant that would reduce coal consumption while raising power output thereby reducing emissions; (b) assessing river pollution caused by waste water from geothermal drilling being released into the river and the feasibility of drilling wells to re-inject waste water back into the reservoir;

India: Under a new comprehensive energy conservation project, detailed conservation audits have increased energy efficiency in the industrial, transport, residential and commercial sectors, while fostering institutional development and contributing to the formulation of national energy efficiency and emission standards.

GLOBAL ENVIRONMENT FACILITY PROJECTS : GLOBAL WARMING

30 June 93

GEF PROJECTS - GLOBAL WARMING

(US$ Thousands)

TRANCHE	REGION	PROJECT NUMBER	PROJECT TITLE	EXEC AGENCY	THEME	APPROVED ALLOCATIONS
1st	GLOBAL	GLO/91/G31/A/1G/31	Greenhouse gas from rice fields	OPS	GW	5,000.0
1st	GLOBAL	GLO/91/G32/M/1G/16	Monitoring greenhouse gases	WMO	GW	4,800.0
1st	ASIA	CPR/91/G32/A/1G/42	Limiting emissions of greenhouse gases	WB	GW	2,000.0
1st	ASIA	CPR/92/G31/A/1G/01	Coalbed methane	DESD	GW	10,000.0
2nd	AFRICA	ZIM/92/G31/M/1G/01	Photovoltaics for homes/communities	DESD	GW	7,000.0
2nd	ASIA	RAS/92/G31/C/1G/31	Least cost greenhouse gas reduction	OPS	GW	304.8
2nd	ASIA	RAS/92/G33/A/1G/45	Least cost GH gas reduction (main phase)	ADB	GW	9,195.2
2nd	LATIN AMER	BRA/92/G31/A/1G/99	Billy Aidel resource development	NEX	GW	7,500.0
2nd	LATIN AMER	PER/92/G31/A/1G/01	Biomass gasification & gas turbines	NEX	GW	7,700.0
2nd			Tech asst to Centre for energy conservation	DESD	GW	900.0
3rd	GLOBAL	GLO/92/G31/A/1G/31	START global change initiative	OPS	GW	4,000.0
3rd	ASIA	IND/92/G32/A/1G/99	Bio energy from waste	NEX	GW	5,500.0
3rd	ASIA	PAK/92/G31/A/1G/99	Fuel efficiency in road transport sector	NEX	GW	7,000.0
3rd	LATIN AMER	RLA/92/G34/A/1G/31	START global change initiative (sub-project)	OPS	GW	3,000.0
4th	INTERREG'L	INT/93/G31/A/1G/31	Alternatives to slash & burn research initiat	OPS	GW	3,000.0
4th	AFRICA	RAF/93/G31/A/1G/31	Sub-saharan greenhouse gas assessment	OPS	GW	2,000.0
4th	AFRICA	RAF/93/G32/A/1G/31	W. Afr. control GH gas thru energy efficiency	OPS	GW	3,500.0
4th	AFRICA	BEN/93/G31/A/1G/99	Mgt of woody savanna and established woodlots	NEX	GW	2,500.0
4th	AFRICA	MAU/93/G31	Wind electric power for socio-economic develo		GW	2,000.0
4th	ARAB STATES	SUD/93/G31/A/1G/99	Rangeland rehabilitation for carbon sequestra	NEX	GW	1,500.0
4th	LATIN AMER	CHI/93/G31/A/1G/99	Reduction of greenhouse gases	NEX	GW	1,700.0
5th	GLOBAL	GLO/93/G31/A/1G/31	Climate change capacity bldg.	OPS	GW	900.0
5th	AFRICA	LRT/93/G31	Electricity & fuel from industrial waste		GW	2,500.0
5th	ARAB STATES	RAB/93/G31	GH gas reduction strategy		GW	2,500.0
5th	ASIA	IND/93/G31	GH gas reduction		GW	1,500.0
PRIF	AFRICA	CMR/93/G41	GW mitigation		GW	400.0
PRIF	ARAB STATES	JOR/93/G41/A/1G/31	Methane reduction & util of municipal waste	OPS	GW	200.0
PRIF	ARAB STATES	SYR/93/G41/A/1G/31	Electricity demand side mgt	OPS	GW	500.0
PRIF	ARAB STATES	YEM/93/G41/A/1G/31	LPG substitution programme	OPS	GW	800.0
PRIF	ASIA	CPR/91/G42/A/1G/42	Sichuan gas transmission	WB	GW	1,400.0
PRIF	ASIA	THA/92/G41/A/1G/42	Energy efficiency	WB	GW	600.0
PRIF	LATIN AMER	VEN/93/G41	Methane leaks in Maracaibo network		GW	1,000.0
		TOTAL				102,400.0

WORLD BANK

INVESTMENT PROJECTS-WORLD BANK

Summary of Status of GEF Work Program

Country GEF Component/Project (Associated Bank Project)	Objective	RED Contact/ Task Manager	Approximate GEF Funding ($ million)	Estimated Approval Date
AFRICA				
Mali Household Energy (Second Power Project)	Global Warming (reduction of deforestation & emission of greenhouse gases, substitution of fuelwood by kerosene & gas)	Floor/ Bertilsson 202-473-4188	2.50 (5 million bilateral cofinancing sought)	Oct. 93
Mauritius Sugar Energy Biotech. (Sugar Energy Dev.)	Global Warming (sugar-mill energy efficiency, model cane tops & trash recovery handling & contribution for power generation)	Vidaeus/ Bertilsson 202-473-4188	3.00	March 92 (approved)
Nigeria Escravos Flared Gas Reduction (Escravos Flared Gas Reduction Project)	Global Warming (gas flare reduction, energy efficiency, LPG, major global GHG point source)	Bond/ Bertilsson 202-473-4188	25.00	Sep. 93
Cote d'Ivoire Crop Waste Power Project (Biomass Energy Development)	Global Warming (Power generation from palm oil and coffee crop processing residues, private sector power production)	Floor/ Bertilsson 202-473-4188	5.00	Feb. 94
Global Warming Total			35.50	

INVESTMENT PROJECTS - WORLD BANK

Summary of Status of GEF Work Program

Country GEF Component/Project (Associated Bank Project)	Objective	RED Contact/ Task Manager	Approximate GEF Funding ($ million)	Estimated Approval Date
LATIN AMERICA & THE CARIBBEAN				
Mexico Electric Power End-Use Efficiency (Free-standing)	Global Warming (compact fluorescent bulbs and tubes, innovative utility financing/consumer purchase, incentive schemes organizational learning)	Osae-Addo/ Luzuriaga 202-473-8768	10.00	Oct. 93
Costa Rica Grid-integrated Advances Windpower Project (Inter-American Development Bank Power Sector Loan)	Global Warming (fossil fuel displacement, commercial scale wind turbines, connected to national grid)	Calderon (IDB)/ Osae/Addo 202-473-8768	3.30	Dec. 93
Global Warming Total			13.30	

Country GEF Component/Project (Associated Bank Project)	Objective	RED Contact/ Task Manager	Approximate GEF Funding ($ million)	Estimated Approval Date
EUROPE, MIDDLE EAST AND NORTH AFRICA				
Poland Coal-to-Gas (Heat supply & restructuring)	Global Warming (energy efficiency, natural gas, small-scale industry housing apartment complex total energy supply systems)	Arif/ Benmessaoud 202-473-2696	25.00	Sep. 93

INVESTMENT PROJECTS - WORLD BANK

Summary of Status of GEF Work Program

Country GEF Component/Project (Associated Bank Project)	Objective	RED Contact/ Task Manager	Approximate GEF Funding ($ million)	Estimated Approval Date
EUROPE, MIDDLE EAST AND NORTH AFRICA (cont.)				
Iran Transport Energy (Free-standing)	Global Warming (transport fleet efficiency upgrade, strategic planning, global environment coefficient of urban management systems design)	Arif/ Tharakan 202-473-2597	2.00	July 93
Morocco Repowering Existing Power Plant (Free-standing)	Global Warming (advanced gas turbine, cycle efficiency improvement, plant life extension)	Arif/ Larrieu 202-473-0249	6.00	April 94
Russian Federation GHG Reduction in Natural Gas Supply (Petroleum Sector Loan)	Global Warming (pipeline and compressor efficiency improvement; point of end-use efficiency)	Arif/ Stuggins 202-473-2607	3.20	Dec. 93
Czech & Slovak Republics Ozone Depleting Substances Reduction	Ozone Protection (identification of Key ODS reduction activities & new tech. for production recycling & ODS substitution)	Arif/ Rahill 202-473-7289	3.80	Nov. 93
Global Warming Total			36.20	
Ozone Protection Total			3.80	

INVESTMENT PROJECTS - WORLD BANK

Summary of Status of GEF Work Program

Country GEF Component/Project (Associated Bank Project)	Objective	RED Contact/ Task Manager	Approximate GEF Funding ($ million)	Estimated Approval Date
ASIA				
China Sichuan Gas Dev. & Conservation (Sichuan Gas Conservation)	Global Warming (distribution & transmission gas loss evaluation and reduction)	Johnson/ Shum 202-458-2452	10.00 (10 million GEF cofinancing sought)	Dec. 93
Philippines Geothermal Energy Development (Leyte/Luzon Geothermal)	Global Warming (renewable energy, cost- effective CO2 avoidance)	Johnson/ Fernandez 202-458-0476	30.00 (40 million GEF cofinancing sought)	Aug. 93
India Alternative Energy (Renewable Energy Project)	Global Warming (photovoltaic power, wind- power, financing/policy innovation)	Johnson/ Manzo 202-458-1466	26.00 (4 million GEF cofinancing sought)	Dec. 92 (approved)
Thailand Electricity Conservation (Distribution System & Energy Efficiency)	Global Warming (energy conservation, low cost GHG reduction, innovative demand management technologies)	Johnson/ Mehta 202-458-0472	9.50 (6 million GEF cofinancing)	April 93 (approved)
Pakistan Integrated Community Waste-to-Energy Systems (Punjab Urban Development Project)	Global Warming (landfill gas recovery/utilization, major methane source globally)	Arif/ Halldin 202-473-2519 (task mgt. of GEF component under EMTEN)	11.00	June 94
Global Warming			86.50	

TECHNICAL ASSISTANCE PROJECTS - UNDP

Summary of Status of GEF Work Program

Region/Country	Project/Objective	Task Manager	Approximate GEF Funding ($ million)	Estimated Approval Date
AFRICA				
Reg'l: Sub-Saharan Africa	GHG Assessment and Least- Cost Glo. Warming Mitigation	Charles McNeill Tel: 212-906-5960	2.0	Aug. 93
Reg'l: West Africa	Control of GHG through Energy Efficient Bldg. Technology	Charles McNeill	3.5	Sep. 93
ASIA & THE PACIFIC				
Regional	Least-Cost Greenhouse Gas Reduction Plans	Nileema Noble Tel: 212-906-6575	9.5	Aug. 93
LATIN AMERICA & THE CARIBBEAN				
Chile	Reduction of Greenhouse Gases	Nicholas Remple Tel: 212-906-5426	1.7	May 93
INTER-REGIONAL				
Inter-regional	START Global Change Initiative	Philip Reynolds Tel: 212-906-5866	7.0	May 93 July 93
Total Global Warming			23.7	

TECHNICAL ASSISTANCE PROJECTS - UNEP

Summary of Status of GEF Work Program

Project/Region	Objective	Task Manager	Approximate GEF Funding ($ million)	Estimated Approval Date
Global Greenhouse Gases Country Case Studies	Global Warming (greenhouse gases emissions and sinks inventories, deforestation in Amazonian region)	Usher/Short UNDP Gen.# Tel: (254 2) 230-800	$4.5	July 92
Total Global Warming			$ 4.5	